Operate a Deep Fat Fryer

Marine Corps Food Service Schools

Marine Corps Detachment

Fort Lee, VA

TERMINAL LEARNING OBJECTIVE

In a food service environment, given appropriate equipment, appropriate tools and personnel, operate Food Preparation and Service Equipment (FPSE), to ensure equipment is operated safely and correctly. (3381-GARR-1500)

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ENABLING LEARNING OBJECTIVES

(1) Given a deep-fat fryer, subsistence supplies, cooking utensils and references, operate a deep-fat fryer, to ensure all products are prepared in accurate quantities, acceptable quality and in a timely manner. (3381-GARR-1500b)

(2) Given a grill, brazier, deep-fat fryer, oven, food processing equipment, steam-jacketed kettle, vegetable steamer, steam table, food warmer, tools and references, perform user level maintenance, to ensure all Government assets remain in 100% operating and serviceable condition. (3381-GARR-1500j)

(3) Given a grill, brazier, deep-fat fryer, oven, food processing equipment, steam-jacketed kettle, vegetable steamer, steam table, food warmer, tools and cleaning supplies, clean Food Preparation and Serving Equipment (FPSE), to ensure all Government assets remain free of food borne contaminants. (3381-GARR- 1500k)

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THE DEEP-FAT FRYER

- **Filling fry tank**
  - **Fill with liquid shortening**
  - **Solid shortening**
    - **May be used only in fryers equipped with a melt cycle**
    - **Using solid shortening with no melt cycle can damage the fryer and scorch the shortening**
  - **Fill between MIN and MAX lines**
  - **DO NOT fill past the MAX line**

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THE DEEP-FAT FRYER

- **Start up using manual pilot**
  - **Plug in power cord**
  - **Turn main gas valve ON**
  - **Fill fry tank with shortening**
  - **Turn thermostat OFF**
  - **Open access door and push the gas valve extension arm in and turn to OFF**
  - **<u>WAIT 5 MINUTES</u> for the unburned gas to vent**

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THE DEEP-FAT FRYER

- **Start up using manual pilot (cont)…**
  - **Push the gas valve extension arm in and turn to PILOT**
  - **While depressing the gas valve extension arm, light the pilot, holding the extension arm in for several seconds until the pilot light stays lit**
  - **If the pilot light goes out, repeat the steps**
  - **Turn gas valve extension arm to ON**
  - **Set thermostat to desired temperature**
  - **When set temperature is reached, the fryer cycles on and off to maintain temp**

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THE DEEP-FAT FRYER

- **Start up with electronic igniter**
  - **Plug in power cord**
  - **Turn main gas valve on**
  - **Fill fry tank with shortening**
  - **Open access door and turn the gas valve extension arm located inside cabinet door to OFF**
  - **<u>WAIT 5 MINUTES</u> for unburned gas to vent**
  - **Turn the gas valve extension arm to ON**

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THE DEEP-FAT FRYER

- **Start up with electronic igniter (cont)…**
  - **If pilot fails to light within 90 seconds, press power switch off and repeat steps until pilot lights**
  - **30 seconds after the pilot ignites, the fryer begins heating to the programmed fry temperature**
  - **When the set temperature is reached, the burners shut off and actual set temperature is displayed in the window**
  - **The fryer then cycles on and off to maintain the set temperature**

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THE DEEP-FAT FRYER

- **Cooking**
  - **Load basket; do not overfill**
  - **Carefully lower baskets into the shortening**
  - **When ready, carefully lift baskets out**

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THE DEEP-FAT FRYER

- **Shutdown**
  - **Turn the thermostat knob to OFF**
  - **Turn the gas valve extension arm to PILOT**
  - **To shut off all gas to the system, including the pilot, turn gas valve extension arm to OFF**

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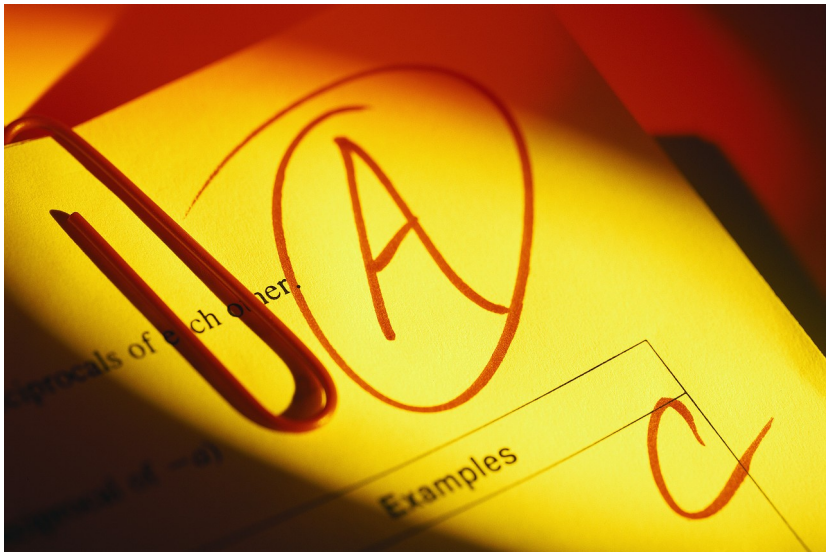
CHECK ON LEARNING



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CARE AND MAINTENANCE OF THE DEEP-FAT FRYER

- **Filtering Oil**
  - **At least once per week**
  - **Using oil more frequently, you should filter it more often**

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CARE AND MAINTENANCE OF THE DEEP-FAT FRYER

- **Manual Filtering**
  - Turn off
  - Remove from power source
  - Allow oil to cool
  - Assemble required utensils/equipment
    - Container
    - Cone shaped oil filter
    - Cone filter holder
    - Tongs
    - 16 oz ladle or larger
    - Drain rod (to ensure drain hole remains open)
    - Drain extension pipe

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CARE AND MAINTENANCE OF THE DEEP-FAT FRYER

- **Filtering Oil (con't)**
  - Place container on floor
  - Place filter holder and filter in place over container
  - Connect drain extension pipe
  - Remove large pieces of food waste with tongs and place in filter
  - SLOWLY, turn drain valve, located in cabinet under Deep-Fat Fryer
  - Catch food particles in filter

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CARE AND MAINTENANCE OF THE DEEP-FAT FRYER

- **Filtering Oil (con't)**
  - Use ladle to run some filtered oil through the drain
  - Once oil is completely drained, shut off drain valve
  - Hold filtered oil for later use
  - Discard oil filter and food remnants
  - Clean deep-fat fryer
  - Pour filtered oil back into clean deep-fat fryer

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CARE AND MAINTENANCE OF THE DEEP-FAT FRYER

- **Automatic Filtering**
  - **Several models**
  - **Each model is specific and different**
  - **See specific operators manuals**

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CARE AND MAINTENANCE OF THE DEEP-FAT FRYER

- **Cleaning the Deep-Fat Fryer**
  - Turn off deep-fat fryer
  - Remove from power source
  - Allow oil to cool
  - Empty oil
  - Fill with warm water and general purpose soap solution
  - Turn on deep-fat fryer to 350 degrees

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CARE AND MAINTENANCE OF THE DEEP-FAT FRYER

- **Cleaning the Deep-Fat Fryer (con't)**
  - Boil water for 10-15 minutes
  - Turn off
  - Remove from power source
  - Allow hot water to cool
  - Drain water and discard
  - Rinse with potable water
  - Wipe off basin and heating element with paper towels
  - Wipe off remaining surfaces

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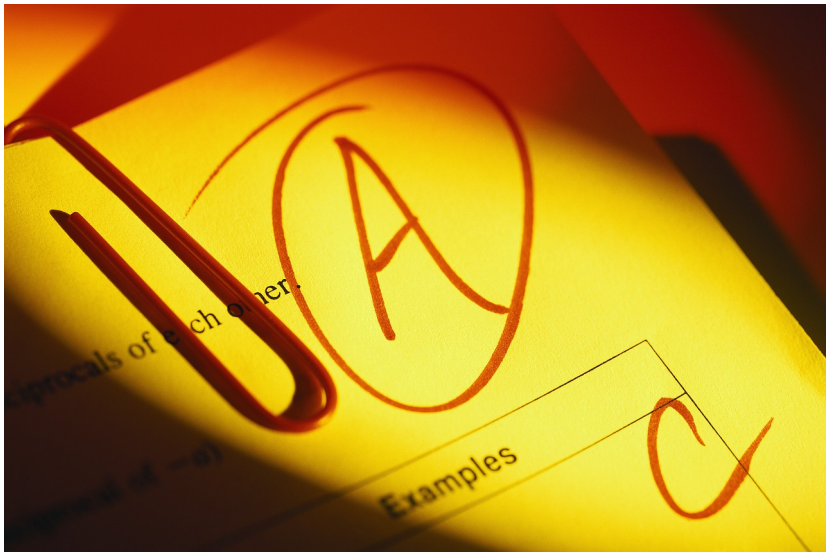

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SUMMARY

During this period of instruction we have covered:

(1) Operation of the Deep-Fat Fryer

(2) Care and Maintenance of the Deep-Fat Fryer

ANY QUESTIONS????

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DEMONSTRATION

- MUSTER AROUND THE DEEP-FAT FRYER FOR A DEMONSTRATION

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